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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/910,594

07/20/2001

Kenji Tokumitsu

16869N-029500US

2186

20350

7590

08/18/2004

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EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/910,594

**Applicant(s)**

TOKUMITSU ET AL.

**Examiner**

Peter Vincent Agustin

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                       |                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                      | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____                                                |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 8-11, 15 & 16 are objected to because of the following informalities:  
  
Claim 8, line 5: "in information" should be --in the information--.  
  
Claim 8, line 6: "said defective" should be --said defective area--.  
  
Claim 9, line 2: "allowable number of times of information" should be --allowable number of times of recording of information--.  
  
Claim 15, line 6: "inn" should be --in--.  
  
Claims 10, 11 & 16 are dependent upon objected base claims.  
  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 6, 8, 9 & 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami (US 5,574,708).

In regard to claim 1, Kawakami discloses an information recording medium (figure 1, element 1) which includes a user data area (figure 4, element 2a) and a medium management information area (column 6, lines 3-5) and which allows update of information, comprising: an alternative area for a defective area on said information recording medium detected when information is recorded or reproduced (figure 4, element 2b); a management area for

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management of correspondence between said defective area and said alternative area (figure 4, element 2b); and information recorded on said information recording medium indicative of an allowable number of times of recording of information (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 3, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b), and a medium management information area (column 6, lines 3-5) to store update information, wherein information representative of an allowable number of times of recording of information is previously recorded to said information recording medium (column 5, lines 52-59; column 6, lines 3-5), said method comprising: if a defect on said information recording medium is detected during recording or reproduction of information, then selectively recording information indicating a location in said alternative area that is used in place of said defect to said medium management information area (column 3, lines 33-48), wherein said step of selectively recording is performed if a number of recordings made to said information recording medium does not exceed said allowable number of times of recording (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 4, Kawakami discloses that an information update count is recorded to said medium management information area (column 5, lines 52-59) and wherein said update information is selectively stored to said medium management information area based on a comparison of said update count and said allowable number of times of recording (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 6, Kawakami discloses that if said allowable number of times of recording is set (figure 5, step S10; column 7, lines 4-8), then allowing updates of recording times to said medium management information area when said update count is less than said allowable number of times of recording (figure 5, step S11; column 7, lines 8-10) and not allowing said updates of recording times to said medium management information area when said update count is greater than or equal to said allowable number of times of recording (column 7, lines 18-20 & 65-67), and wherein if said allowable number of times of recording is not yet set, then allowing said updates of recording times to said medium management information area. It should be noted that in the event that the “allowable number of times of recording is not yet set”, the allowable number of times is assumed to be infinite, i.e., step S10 of figure 5 will decide that the number of writing times is not greater than the number of life times; therefore, unlimited recording is allowed.

In regard to claim 8, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 1, element 1) which allows update of information, comprising the steps of: recording information indicating an alternative area (figure 4, element 2b) associated with a defective area to a medium management information area (figure 1, element 31) in the information recording medium when said defective area is detected during said recording or reproducing information (column 3, lines 33-48), and controlling said recording and reproduction of information depending on the number of times said information is recorded to said medium management information area (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 9, Kawakami discloses that the allowable number of times of recording of information is previously recorded to said information recording medium (column 5, lines 52-54; column 6, lines 3-5), said method further comprising a step for controlling the recording and reproduction of information by comparing said allowable number of times of recording to said number of times an alternative area is recorded to said medium management information area (figure 6, step S13; see also column 5, lines 52-63).

In regard to claim 13, Kawakami discloses an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for detected defects, a medium management information area (figure 1, element 31) to store update information, wherein information representing an allowable number of times of recording of information is pre-recorded on said information recording medium (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 14, Kawakami discloses an information recording medium (figure 1, element 1) having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for detected defects, and a medium management information area (figure 1, element 31) to store update information, wherein an update count of recordings made to said medium management information area is recorded in said medium management information area, wherein information representative of an allowable number of times of recording of information is previously recorded on said information recording medium (column 5, lines 52-54; column 6, lines 3-5).

In regard to claim 15, Kawakami discloses an information recording control method for conducting recording and reproduction of information to an information recording medium

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(figure 1, element 1), said information recording medium having a user data area (figure 4, element 2a), an alternative area (figure 4, element 2b) for the defective area, and a medium management information area (figure 1, element 31) to store update information, wherein an update count representative of a number of recordings made to said medium management information area is recorded in said medium management information area, and wherein information representative of an allowable number of times of recording of information is previously recorded on said information recording medium, and wherein recording operations are prevented when said update count exceeds said allowable number of times of recording of information (column 5, lines 52-63; column 6, lines 3-5; figure 6, step S13).

4. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (hereafter Ito) (US 5,715,221).

Ito discloses an information recording control method for conducting recording and reproduction of information to an information recording medium (figure 13, element 1312) which allows update of information, comprising the steps of: recording information indicating an alternative area associated with a defective area to a medium management information area in the information recording medium when said defective area is detected during said recording or reproducing information (column 4, lines 28-32), and controlling said recording and reproduction of information depending on the number of times said information is recorded to said medium management information area (figure 14, step S1404; column 10, lines 36-39).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5, 10, 11 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami in view of Ito.

In regard to claims 5 & 16, for a description of Kawakami, see the rejection above.

Kawakami, however, does not disclose that the recording to said medium management information area is continued when said medium management information area is recorded in multiple on the two or more areas and recording is completed normally to the two or more predetermined number of areas among said multiple recording areas.

Ito in the defect management art, discloses that the recording to said medium management information area is continued when said medium management information area is recorded in multiple on the two or more areas and recording is completed normally to the two or more predetermined number of areas among said multiple recording areas (column 2, lines 29-30). It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to have added the step of continuing the recording to two or more predetermined areas as suggested by Ito to the method of Kawakami. The motivation would have been to increase the reliability of recording even with the presence of errors.

In regard to claim 10, Kawakami discloses a step for continuing the recording and reproduction of information when the recorded information is read out normally (figure 7, steps S25 & S27). Kawakami, however, does not disclose that the information indicating the alternative area is recorded to said medium management information area in multiple to a plurality of areas.



Ito in the defect management art, discloses that the information indicating the alternative area is recorded to said medium management information area in multiple to a plurality of areas (column 2, lines 29-30). It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to have recorded the information in multiple areas as suggested by Ito in addition to the method described by Kawakami. The motivation would have been to increase the reliability of recording even with the presence of errors.

Furthermore, in regard to claim 11, Kawakami discloses that the recording and reproduction of information are continued when the number of normal areas in said medium management information area is the predetermined number or larger even if the number of times of recording to said medium management information area is said allowable number of times of recording or larger (figure 6, steps S13 & S16).

### ***Response to Arguments***

7. Regarding claim 1, applicant argues that Kawakami clearly describes “a number of lifetimes” information being stored in EPROM (41) which is separate from the optical disk, but does not show the claimed “allowable number” information being “recorded on said information recording medium” as claimed. The examiner disagrees because applicant did not consider every teachings from Kawakami. Kawakami also teaches that “the number of writing times of each block maybe written in each block of the optical disk as well (see column 6, lines 3-5).

Regarding claim 8, applicant argues that neither Kawakami nor Ito shows that writing operations are dependent on the number of times the medium management information area is recorded. The examiner disagrees. Kawakami discloses this limitation in column 5, lines 52-63. It should be noted that the “number of life times” is stored on the memory 31, which corresponds

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to the claimed medium management information area. It discloses this limitation in column 10, lines 36-39. In this case, the SDL recited on column 10, line 34 corresponds to the claimed medium management information area.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

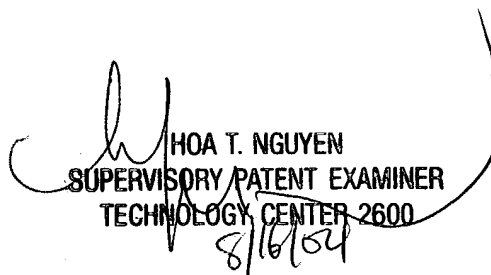
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 703-305-8980. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin  
Art Unit 2652  
August 16, 2004

  
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8/16/04